

Light green to dark green: how to make sense of responses to environmental problems

When we began to explore how particular groups responded to golf-related environmental problems, we encountered a range of viewpoints, actions, and suggestions for change. We came across those who think that golf courses should be abolished outright, those who think that golf courses should not be built close to where they live, and those who see the need for radical transformation in how golf courses are maintained (see Chapters 8 and 9). We also came across those who see golf as *potentially* beneficial. For example, we met members of a local activist group fighting to save a golf course built on a former landfill site – a meeting that led us to find literature supporting the idea that, under particular circumstances, golf can provide green space for flora and fauna to thrive, and may even help environmental recovery on particular sites (see Colding *et al.*, 2009; Ede, 1990; Misgav *et al.*, 2001; Price *et al.*, 2013). Furthermore, we encountered views from golf industry representatives stressing how course development and maintenance techniques are guided by the latest science and best practices. Thus, while practices such as chemical spraying might seem risky at first glance, according to many industry members golf is, in fact, ‘in good hands’ when it comes to its environmental implications.

However, it was when we began to consider *why* particular groups responded to golf-related environmental problems the way they did, and especially why some approaches have become dominant and others marginal, that we began to notice some especially interesting, and at times troubling, themes and tensions. These themes and tensions pertained especially to questions about how chemicals should be used on golf courses, or if they even should be used at all. Related to this, we encountered different views on the level of risk to which humans and non-humans should reasonably be exposed for the sake of a leisure activity – albeit a sometimes lucrative activity for some industry stakeholders. We also saw that different groups had varying levels of ‘faith’ in the latest studies on the health and environmental impacts of chemicals, and also quite distinct interpretations of existing research on this topic. These same groups also differed

when it came to their faith in the ability of humans to find innovative solutions to longstanding environmental issues.

For sociologists who study the assumptions that underlie particular responses to environmental problems, it is not difficult to see how these different perspectives are associated with common, and in many ways competing, stances on how environmental problems should be dealt with in general. On the one side, we have those aligned with what is commonly termed a 'sustainability' approach to dealing with environmental problems – an approach that is based on principles associated with a theory known to sociologists as 'ecological modernization.' Of course, sustainability has become a buzzword for businesses, governments, and even many environmentalists in recent years. As we will show, it is often interpreted in a business-friendly or 'light-green' way (Lenskyj, 1998). On the other side are perspectives that more closely align with a 'dark-green' approach to dealing with environmental issues. Those working from this more ecocentric perspective typically point to flaws in the logic underlying business-friendly solutions to environmental problems, emphasizing how the incentive system driving business-friendly environmentalism can be exploited by those motivated, above all, by economic goals. Those adopting a dark-green position are also more likely to recognize the various inequalities relevant to environmental issues (Maguire *et al.*, 2002). These include both intergenerational inequalities, whereby future generations are impacted by the environmentally damaging activities of the present day, and inter-species inequalities, which pertain to the impacts of human behaviour on 'voiceless' non-humans such as flora and fauna. Ultimately, supporters of a dark-green position argue that these inequalities need be taken seriously by those who make decisions that impact on the environment. They also suggest that the health of the environment – that is, the Earth and its ecosystems – should account for more than 'one third' of the triple bottom that is allotted by advocates of a sustainability approach (alongside social and economic concerns).

Put another way, the assumptions underlying light and dark-green responses to environmental problems in general tell us a great deal about the assumptions underlying responses to golf-related environmental problems in particular. To help us explain the principles guiding these different responses, in this chapter we explore the details and taken-for-granted aspects of different stances on environmental issues. We also discuss how, once it is recognized by all that environmental concerns indeed merit our attention, we might explain why particular perspectives on and responses to these concerns are dominant and taken for granted, and others are marginalized. We expound in this chapter on the

PAAR spectrum we developed through our research. This is a heuristic tool we use to map different ways of dealing with golf-related environmental issues, ranging from **pro-golf** to **alter-golf** to **anti-golf** responses.

This chapter is the lynchpin of the book in the sense that understanding different approaches to environmental decision-making and the assumptions that underpin these approaches is crucial if we are to offer a perceptive and rigorous assessment of how the golf industry has responded to environmental concerns over time. That is to say, when the assumptions underlying different approaches to environmentalism are highlighted and appreciated, then particular environmental practices begin to ‘make sense’. From here, we are then better positioned to consider who benefits and who (or what) might be adversely affected when certain environmental pathways are chosen – and to begin to think about recommendations for promoting forms of environmentalism that do not undermine social and environmental goals in the name of economic progress. We ultimately provide such recommendations in the book’s final chapter.

‘Light-green’ environmentalism: an ecological modernist narrative

We begin this chapter in earnest, then, with a review of ecological modernization (EM) and its links to the notion of sustainability. As a theory guiding environmental decision-making, EM stems in large part from German, Dutch, and British writing on the evolution of industrialization and its environmental impacts. At its core, EM theory rests on the simple premise that economic growth and environmental degradation can effectively be ‘decoupled’: the former need not necessarily engender the latter. The EM narrative is therefore distinguishable from the narratives offered by proponents of theories such as ‘limits to growth’ and the ‘treadmill of production’ (both described below) who assert that economic productivity in the post-Second World War years set the stage for ecological collapse. Indeed, it was the perceived failure of this critical (i.e. Marxist-informed) theorizing in the 1970s that, to a great extent, spurred the arrival of EM as a viable theoretical construct.

As EM advocate Arthur Mol described in his 2003 book *Globalization and Environmental Reform: The Ecological Modernization of the Global Economy*, the institutional changes stemming from the transformative sensibilities of limits to growth proponents in the 1970s and 1980s were ‘meagre’, thus paving the way for an era of more pragmatic thinking and more conciliatory efforts at resolving

environmental problems. In fact, one of the most attractive aspects of EM is the apparent optimism that underlies its message of progress: that a consumer society can be a sustainable society. This feature of EM made it preferable to the 'bad news' stories offered by those who see many of EM's premises to be illusory, and who advocate for broad-based economic and lifestyle changes that are not easily digestible for businesses and many consumers. Gould, Pellow, and Schnaiberg (2004) – proponents of some of the more critical perspectives outlined below – readily admit that their narrative on environmental degradation and consumption is especially depressing reading for those wishing to believe that environmental sustainability is achievable.

While criticisms of EM abound, we do not want to underestimate what this theory has to offer, nor dismiss the compelling arguments that EM advocates continue to make. Perhaps the most intriguing assumption contained in EM theorizing is that human ingenuity in the name of environmental sustainability can light a pathway out of the 'darkness' of environmental degradation. To be precise, in the EM imagination it is technological innovation that has traditionally stood as the 'silver bullet' for resolving environmental problems (Davidson, 2012). This was especially true in early writing on EM – particularly the work of Huber (1982, 1985) – that envisioned a technology-aided switch from 'dirtier' forms of industrialization to 'clean,' super-industrial methods of production. Innovation is, in this sense, a propulsive force. Moreover it fits together with a deregulatory sensibility. Indeed, for those championing 'weak' or techno-corporatist versions of EM, government intervention is seen as a last resort, to be taken when voluntary and market-based mechanisms fail (Davidson, 2012: 37; also see Christoff, 1996; Hajer, 1995). This deregulatory sensibility is also a hallmark of neoliberalism – with neoliberalism referring here to a form of governance and an ideology that is based on the idea that market mechanisms can best lead to the resolution of economic, social, and environmental problems (Harvey, 2005). The idea, in other words, is that consumers who value pro-environment work will support businesses that are leading the development and implementation of 'green' products and services. This, in turn, will inspire further innovation among businesses, who will continue to serve the needs of the environment as a logical result of their economic self-interest (Wilson, 2012a, 2012b). 'Weak' EM also sits alongside stronger versions of this theory. The latter impress the need for government intervention in cases where industries are unreceptive to adopting cleaner technologies or where more socially just environmental outcomes might be achieved (see Christoff, 1996; Davidson, 2012). In both cases, though, the market stands as

a driver of positive environmental outcomes, given its place as a site par excellence for innovation.

Although the term ecological modernization has not (yet) achieved mainstream cachet, as noted earlier, EM is closely affiliated with the widely recognized concept of sustainable development and its more politically palatable variant, sustainability (politically palatable in that it drops the reference to development, and thus more easily avoids the critique that economic motives are in fact driving environmental decision-making). The origins of sustainable development lie with the 1987 World Commission on Environment and Development (WCED) (also known as the Brundtland Commission) where the term was defined as follows: “meeting the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987: 8; also see Chernushenko *et al.*, 2001). Said another way, through the prism of sustainable development, economic, social, and environmental concerns – the ‘triple bottom line’ – are inseparable, and as such must be dealt with in an integrated manner. In the late 1980s and early 1990s, this was an appealing logic to governments and businesses alike in the face of more radical formulations urging the curtailment of economic expansion. ‘Third sector’ organizations, and especially more mainstream environmental NGOs, have largely embraced sustainable development as well – a point we explore in later chapters. By the mid-1990s, sustainability discourses had achieved mainstream integration to the point that Campbell (1996) was moved to proclaim that, in the ‘battle’ of public ideas, sustainability had won: “the task of the coming years is simply to work out the details, and to narrow the gap between theory and practice” (Campbell, 1996: 312, cited in Krueger and Gibbs, 2007: 1).

Of course, sustainable development, as a theoretical concept, is linked with a range of practices when it comes to its ‘real’ applications. It is possible, therefore, to emphasize the latter half of the concept’s definition: “meeting the needs of the present *without compromising the ability of future generations to meet their own needs*”. This could serve as a rationale for limiting industrial expansion in the name of protecting future generations against, for example, dangerous levels of atmospheric carbon dioxide. In other words, it could justify a ‘limits to growth’ approach, and *demodernization*. One might also interrogate how ‘needs’ is interpreted in this definition. Are golf courses, and particularly conspicuously ‘green’ ones, a need of present generations? The key point for the time being is that sustainable development, in moving from theory to practice, has been tethered to the principles of EM. As Keil (2007) says, through its relationship with EM,

sustainability is “redefined as one of the possible routes for a neoliberal renewal of the capitalist accumulation process” (Keil, 2007: 46).

It is clear at this point why sustainability and EM principles are so appealing. At its core, EM is a theory of social change (Buttel, 2000), one that carries forward the positive view of modernization – modernization as progress – posited by functionalist scholars such as Talcott Parsons. ‘Stronger’ versions of EM are tied to the ‘reflexive’ modernization perspective that has gained prominence more recently, mainly in that key social actors must take a reflexive and vigilant approach to understanding environmental risks and their potential impacts (though without intruding too severely on corporate activity) (Beck, 1992). As Dryzek (2005) points out, what this means in practical terms is that EM and sustainability are both ‘reassurance’ discourses: “No tough choices need to be made between economic growth and environmental protection, or between the present and the long-term future” (Drzek, 2005: 172). To use Mol’s words, EM has “created the theoretical basis for a growing confidence that environmental reform can no longer be viewed exclusively in apocalyptic terms” (Mol, 2003: 53).

To be sure, there are success stories pertaining to sustainability and EM. The concrete manifestations of sustainability range from bike paths to carbon reduction strategies to increased use of renewable energy sources and beyond (see Krueger and Gibbs, 2007: 6). As we will describe in upcoming chapters, the arrival of IPM in agriculture – and, as we will show, golf course management – has been regarded by some as a technology-aided, ‘modern’ environmental success story as well.

Given the centrality of EM to our analysis in this book, it is worth highlighting Mol’s (2003) review of the five core features of EM-based environmental restructuring before outlining critiques of EM theory and practice. These features are as follows:

- A view that while science and technology are possible ‘causes’ of environmental deterioration in the sense that they have historical and contemporary associations with dirty forms of industrialization, they are also avenues towards resolving and even preventing environmental problems.
- Heightened emphasis on “economic and market dynamics and economic agents” as “social carriers of ecological restructuring, innovation and reform” (p. 61).
- A trend towards “decentralized, flexible and consensual styles of national governance, at the expense of top-down hierarchical command-and-control regulation” (p. 62) – and as such the emboldening of non-state actors such as corporations and NGOs.

- A more centralized role for environmental organizations and activists in government and, at times, in industry decision-making – a move that also brings the need for a less antagonistic and more conciliatory approach from environmentalists and environmental groups.
- A changed socio-political landscape that privileges economic and environmental compromise: “Intergenerational solidarity in the interest of preserving the sustenance base seems to have emerged as the undisputed core and common principle” (p. 62).

The language of ‘undisputed’ in this final passage positions EM as the only viable way forward.

Dark-green environmentalism: questioning ‘super modernity’

Ecological modernization thus presents a compelling narrative. In later chapters we outline how an EM-inspired version of sustainability has taken hold in the golf industry. Paraphrasing Mol, this has effectively countered the view that golf’s environmental future need be seen in apocalyptic terms. Yet EM still has its critics, as does golf. Lingering concerns about golf’s environmental impacts to a great extent reflect ‘darker-green’ theoretical perspectives on the environment.

We can start in this regard from critiques of EM, or at least its key tenets. Some of the most compelling commentaries on this matter pertain to EM theory’s emphasis on technological innovation as an economically friendly solution to environmental problems. Political scientist Thomas Homer-Dixon (2001), while not addressing EM specifically, offered criticism of this type in his book *The Ingenuity Gap*. Homer-Dixon’s concerns lie with science and technology in general, as opposed to their application with respect to the environment alone. The main ‘gap’ Homer-Dixon identifies pertains to the potential for innovative problem-solving. He suggests that there is often a notable ‘time lag’ between the moment problems are identified and the point at which technologies can successfully be developed to resolve them. As Homer-Dixon writes:

The products of science and technology – the treatments for antibiotic-resistant disease, the advanced computer models of Earth’s changing climate, the bio-engineered grains that can grow in a water-scarce world – will not always be there, in the right forms, when and where we want them. History shows that

just because we want a problem solved doesn't mean the problem will be solved.
(Homer-Dixon, 2001: 255–256)

That oil continued to spill into the gulf coast at an alarming rate long after the British Petroleum Deepwater Horizon disaster first took place in 2010 is an excellent example of Homer-Dixon's point. There is also the problem of recognizing environmental issues in their full scope, as the passage of time can reveal certain environmental incidents or practices to be more damaging than first thought (Homer-Dixon, 2001). So too can technologies directed towards 'cleaner' environmental outcomes induce new, environmentally damaging problems of their own (Beck, 1992). We shall see practical manifestations of these concerns in our discussion of methods used to treat golf course turfgrass, even after the turn away from DDT.

We do not read Homer-Dixon's (2001) assessment of the contemporary 'ingenuity gap' as a denunciation of science and technology *tout court*, nor do we take such an approach in our own evaluation of golf. The criticism here is focused on the sometimes zealous faith in technological innovation as a dependable 'solver' of complex problems – in this case environmental ones. Davidson (2012) echoes Homer-Dixon's thoughtful scepticism over technological ingenuity, though his concerns are relayed specifically in relation to EM. The aforementioned distinction between weak and strong EM is relevant to this critique. For those advocating weak EM – that is, the variant taking a more market-oriented approach in keeping with neoliberal principles – the heightened rate of efficiency brought on by innovation is a key avenue towards improved environmental outcomes. But emphasizing efficiency often means downplaying *overall* consumption, something that can indeed rise higher even as production processes are made 'greener', given the growth imperative inherent to capitalism. This phenomenon, termed 'Jevons' paradox', is based on the finding of economist William Stanley Jevons in the mid-1800s that consumption of coal rose higher even as its uses became more efficient (see Davidson, 2012: 38; Wilson, 2012b). Davidson suggests that this same phenomenon was visible more recently as CO₂ emissions rose in the post-war years despite substantial improvements in carbon efficiency. At this point one might return to Mol's (2003) assertion that while early writing on EM heavily favoured technological solutions to emergent environmental concerns, later theorizing 'corrected' this through a heightened focus on the role of the state in guiding prevailing forms of production where necessary. Yet Davidson (2012) counters that the discrepancy between strong and weak variants of EM has been overstated. In his view, while strong

and weak EM advocates may differ in their views on the extent to which governments should direct the economy in the name of achieving positive environmental outcomes, over-reliance on corporate-driven innovation remains a feature of both perspectives.

Foster (2012) argues that the empirical basis for EM is decidedly ‘meagre’, and as such employs the precise language used by EM advocate Arthur Mol (2003) to characterize the practical outputs of more radical environmental theories in the 1970s. Success stories tend to be highly specific and localized, EM critics point out. In keeping with the principles of Jevons’ paradox, they often pertain to the *process* of ‘greening’ capitalism as opposed to improved outcomes. On a larger scale, EM is “largely silent on what to do on a global level” (Dryzek, 2005: 179). As Foster (2012) says:

Ecological modernization theory stresses narrowly defined environmental improvement on a national level, principally in the rich countries of the Triad (the United States, Europe, and Japan), while generally ignoring the ways in which such improvements are shown by ecological footprint analysis to be dependent on greater resource extraction from the global South, and on the movement of polluting industries and toxic wastes abroad to poorer countries. (Foster 2012: 225–226).

This is a critique that resonates among those studying the global expansion of golf – a point we discuss in more detail in later sections of this book.

At the root of these concerns about EM, as well as sustainability, is a familiar point: that care for ecological limits holds little hope in the face of the capitalist growth imperative. To use the language of sustainable development, the ‘triple bottom line’ is moot if the *financial* bottom line overshadows its social and environmental analogues. As Gould, Pellow, and Schnaiberg (2004) say in reflecting on developments from 1976 to the time of their writing: “We could state boldly that increasing the return on *investment has displaced every other social and environmental goal in this period*” (Gould *et al.*, 2004: 305, emphasis in original).

Limits to growth and the treadmill of production

Gould *et al.*'s (2004) arguments are aligned with theories that are commonly invoked to counter EM perspectives – namely, the limits to growth and treadmill of production perspectives. These theories emerged in the 1970s based largely on fears that the relationship between capitalism and the environment,

as constructed to that point, was charting a path towards ecological collapse. As Dryzek and Schlosberg (2005) recount, this fear was not uncommon at the time, as environmental doom-saying was emerging from many directions. A number of texts stressing that mistreatment of the environment would engender the Earth's, and thus humankind's, demise circulated through academic and activist circles, and at times reached the mainstream. The fundamental argument underlying these dire synopses was straightforward enough: "modern economic life assumes that growth and expansion can go on without limits, while the planet is made up of systems of finite resources that are threatened and carrying capacities that we are in danger of overshooting" (Dryzek and Schlosberg, 2005: 7). Elsewhere, Dryzek (2005) notes that the 'limits' idea is tied to a discourse of 'survivalism'. That is to say, the environment question is deemed an existential one – survival hangs in the balance – and as such it mandates draconian interventions in the name of ensuring that ecological limits are not breached.

The book *The Limits to Growth* (Meadows *et al.*, 1972), authored by a research team from the Massachusetts Institute of Technology (MIT), remains the most famous text to enunciate the limits perspective. Informed by computer modeling, the problem these researchers outlined rested on the fundamental character of growth: it was not just that food production, industrialization, pollution, consumption, and population were increasing, they were increasing *exponentially*. With respect to the last element in this list, for example, Meadows and her colleagues highlighted both the rate of growth in the population over the past three centuries, and the rate of growth *in the rate of growth itself* (Dryzek and Schlosberg, 2005: 16). This was in fact 'super-exponential' growth; Meadows *et al.* predicted it would yield a world population of roughly seven billion by the turn of the century. The world's rate of industrial production since the 1930s followed a similar trajectory:

Much of each year's output is consumable goods, such as textiles, automobiles, and houses, that leave the industrial system. But some fraction of the production is more capital – looms, steel mills, lathes – which is an investment to increase the capital stock. Here we have another positive feedback loop. More capital creates more output, some variable fraction of the output is investment, and more investment means more capital. (Dryzek and Schlosberg, 2005: 19)

Stated more simply, capitalism *inherently* sees no limits to expansion, "there is no amount of profit, no amount of wealth, and no amount of consumption that is either 'enough' or 'too much'" (Madgoff and Foster, 2011: 43).

The crux, at least for these purposes, is that all of this means more demand on capitalism's host: the natural environment. Writing in the early 1970s, Meadows *et al.* (1972) acknowledged the lingering uncertainty on the matter of the Earth's ability to absorb pollution. Nonetheless, they highlighted four key areas of concern in relation to the environment: (a) that pollution seemed to be growing exponentially (like population and industrial output); (b) that the upper limit of pollution growth curves was unknown; (c) that ecological processes could have delayed effects; and (d) that pollutants are often globally distributed (Meadows *et al.*, 1972: 69). Pesticides – which, as we shall see, had become crucial by this time to the golf industry – were cited in relation to all four points. For example, the computer model employed by the MIT team showed that even if the usage rate of the chemical DDT was gradually reduced to zero beginning in 1970, such were DDT's lingering effects in the environment that the level of DDT in fish would continue to rise for more than ten years (Meadows *et al.*, 1972: 82). They also noted, and expressed consternation over, the fact that DDT had been found in the body fat of humans “in every part of the globe” (Meadows *et al.*, 1972: 84).

At first glance, the ‘treadmill of production’ concept, introduced by environmental sociologist Alan Schnaiberg (1980), is near identical to the idea of limits to growth. The metaphor of the treadmill is, in essence, shorthand for the positive feedback loops described by Meadows and her colleagues. Investment yields profit, profit yields *reinvestment*, and the treadmill cycle turns over and over. Each round of investment puts greater demand on the Earth's ecosystem – for example, through heightened demand on natural resources.

But what Schnaiberg (1980) added in his initial writing on the treadmill, and what he and his colleagues have since stressed in their updated thinking on this concept, are the sociological underpinnings of capitalism's growth agenda. As Gould, Pellow, and Schnaiberg (2004) recount, the treadmill of production was mainly an ‘economic change theory’, meaning it was focused on the changing allocation of capital investment, and the changing relationship between capital and labour, in the period after the Second World War. “Essentially”, they explain, “the major changes outlined by the theory were that more capital was becoming accumulated in Western economies, and this capital was being applied to replacing production labor with new technologies to increase profits” (Gould *et al.*, 2004: 296). These technologies could themselves require more energy and/or chemicals than labour-intensive production, thus upping the environmental ramifications of production processes. Furthermore, from the treadmill perspective, economic change also exacerbates the need for industrial expansion in the sense that technologies represent forms of ‘sunk

capital': their costs cannot be lessened as easily as, for example, cutting labour, and so profitability-via-expansion becomes all the more important. Gould and colleagues outline the treadmill's mode of operation in step-by-step fashion:

The newer technologies [of the third quarter of the twentieth century] were inevitably more energy intensive and chemical intensive on one hand and less labor intensive on the other. Capital mobilization for these changes in production technology arose from a substantial postwar economic boom, which led to increased production and profits. Next, these profits were disproportionately used to develop and introduce new physical technologies. However, to amortize the fixed and operating costs of the new technology, production generally had to be substantially increased. In turn, this increased the demand for natural resources, both energy and other. Once in place, the expanded production of the new technologies substantially increased both the volume of production waste and the toxicity of wastes (due to increased use of chemicals). (Gould *et al.*, 2004: 300)

The treadmill is thus Marxist in its inclination, with the idea that economic growth is a structuring logic – an *ideology*, as much as an outcome. Indeed, the appeal of economic growth extends beyond industry to governments and publics alike. As Meadows *et al.* (2004) say in their more recent writing on the limits to growth, governments see economic growth as a solution to problems such as employment and upward mobility; publics embrace it “because they believe growth will give them an ever increasing welfare” (Meadows *et al.*, 2004: 6). Furthermore, with its global expansion, the treadmill can be conceived as transnational in its scope.

All told, dark-green perspectives on the environment call into question the logic of the triple bottom line. If environmental sustainability is only valued *to the extent* it complies with economic goals, it is always at risk of being marginalized.

Sport and environmental discourse

How do these theoretical perspectives map on to sport? This is a question we explore throughout this book as it pertains to golf, though our analysis herein is not entirely without precedent. We noted in the previous chapter that sport's relationship with the environment has been studied previously (albeit limitedly), and that this includes initial work in the realm of critical golf studies. Here we can add that this literature in some ways reflects the debates outlined above.

We ourselves have argued previously that ecological modernization has become a powerful force in the realm of sport, even if EM often camouflages itself

in the more accessible language of sustainability (Wilson, 2012a, 2012b; Wilson and Millington, 2013, 2015; also see Karamichas, 2013). An early and important contribution advancing the idea that environmentally and socially responsible sport is 'good for the business of sport' was Canadian environmentalist and consultant David Chernushenko's book *Greening Our Games* (Chernushenko, 1994; also see Chernushenko *et al.*, 2001). To be sure, Chernushenko is aware of the many problems associated with pursuing a sustainable development agenda in and through sport. Not least among these is the fact that such an agenda is easily corrupted by the privileging of economic development ahead of environmental or social goals and the fact that organizations driven by profit may be more committed to appearing green than actually carrying out a comprehensive and responsible green agenda. Even so, Chernushenko remains optimistic about the possibility of sustainability in its various dimensions. He sees great merit in reaching out to sport-related organizations and promoting the triple bottom line benefits of responsible corporate work.

Chernushenko, therefore, effectively voices a 'light-green' perspective – a point not lost on sociologist Helen Lenskyj (1998; also see Lenskyj, 2002) in her own foundational reflections on sport and the environment. But whereas Lenskyj is critical of this light-green sensibility, the optimistic spirit of *Greening Our Games* is now reflected in the practical sustainability initiatives of sport managers and organizers of various stripes. We suggested as much in our own assessment of what we have called 'a new breed of (corporate) environmentalist', what we termed the 'sport management environmentalist', or SME. We defined this archetype in the following way:

The SME is a corporate or corporate-linked environmentalist – a manager, organizer, promoter or other that is often (though not always) affiliated with a sport mega-event. SMEs can also be major sport organizations (i.e. those hosting sport mega-events), corporations (e.g. Mizuno or General Electric), environmental NGOs (e.g. Greenpeace), or members of governments lobbying to host a sport mega-event. (Wilson and Millington, 2015: 366)

Our argument from there is that SMEs are now positioned across the sporting landscape, and that they have come to adopt EM principles in their attempts to organize and carry out sustainable sporting events – even if EM is never mentioned explicitly as being a guiding framework. In this sense, SMEs are effectively staking their claim as the 'new' environmentalists. They are often emboldened by new technologies such as carbon offsetting mechanisms or green forms of venue construction. Their work is furthermore bolstered by the welcoming hand

of governments and, at times, environmental groups keen on using the power and appeal of sport 'for good'. Indeed, events such as the World Conference on Sport and the Environment – a biennial conference jointly hosted by the United Nations Environmental Programme (UNEP) and a local organizing committee for a sport mega-event – provide opportunities for showcasing sustainable sport and for collaborative dialogue between various stakeholders in sport-based environmental initiatives. It is telling in this regard that Arthur Mol (2010), noted above for his generally positive view of EM, has recently described sustainability as an 'attractor' that helps global 'flows' (e.g. of technology/technological ingenuity) 'settle' in particular places, and sporting mega-events as helpful contributors to this process. Mol gives the 2008 Beijing Olympic/Paralympic Games as a case in point. The environment, he writes, "permeated all Olympic processes – design and construction, refurbishment, marketing, procurement, logistics, accommodation, transport, office work, publicity and operational affairs" (Mol, 2010: 508).

The emergence of SMEs makes it hard to contest that stakeholders in sport are, in fact, concerned with the environment. Yet, as might be expected, even in a time of corporate responsibility, sport's relationship with the environment has still earned criticism. Indeed, for Lenskyj (1998), the light-green hue of Chernushenko's account needs be understood against a darker-green understanding of the environment that values nature intrinsically – and not simply when environmentalism aligns with capitalism. Without denouncing innovation in principle, we ourselves have taken a critical view of the prominent place of technological innovation in the recent work of SMEs. For example, we have noted limitations to the popular carbon credit system used to offset the impact of sporting mega-events:

being 'carbon neutral' says little about how local ecosystems were potentially disrupted in the preparations for and holding of sport mega-events. For example, building a highway through an environmentally sensitive green space to an event venue still impacts that particular green space, even if the carbon emissions associated with that construction project are offset. Moreover, the criteria used for assessing what 'counts' as an emission associated with holding a sport event and what counts as an appropriate offset project are not straightforward either. (Wilson and Millington, 2015: 371)

In effect, the idea we are critiquing here – that through the balancing of economic and environmental 'costs and benefits', we can appropriately resolve environmental problems without compromises – is at the core of modernist thinking about what counts as progress. A related point in this regard is that EM, in making

the triple bottom line unassailable, has shifted the ground on which sporting events are assessed. Questions under consideration generally pertain to *how* sustainable events might be organized, and not *whether* the environmental costs of hosting, say, the Olympic and Paralympic Games in the first place are unreasonably high, or whether holding a more modest event might be desirable even if it yields fewer economic benefits (Wilson, 2012a, 2012b). As we shall see in Chapter 7, there are questions here too about whether, in a time of market-based environmental solutions, governments are willing to hold industry to account in meaningful ways should they fail to adopt their pledged sustainability measures. Finally, in reference to golf specifically, Wheeler and Nauright (2006) suggest that heightened environmental awareness and improved practices (e.g. in the use of chemicals) have not been taken up evenly across the globe. This echoes the above-noted view that EM's benefits are highly contextualized.

How leadership is secured: sport, social change, and hegemony

Sport thus remains a site for environmental debate, though the work of SMEs shows that the logic of EM is now dominant. Sport in this sense reflects its wider conditions. The question remains as to *why* EM has become dominant in sport and beyond despite its many criticisms. We know why industries might embrace EM – it is conducive to economic growth. But why would others do so? Why would the public accept 'risky' environmental practices when it may not be in their own best interest to do so? EM advocates might say that EM's impeccable logic underpins its rise to prominence. In this section, however, we highlight sociological conceptions useful in understanding the processes by which certain ideas are accepted over others.

Sociologists have for some time taken interest in how particular groups establish leadership on important and potentially divisive issues. A key concept that is commonly used in this regard is hegemony, indebted especially to the work of Italian social theorist Antonio Gramsci. For Gramsci, power is most effectively maintained when subordinate groups come to accept the perspectives of those in authoritative positions (see Gramsci, 1971). Power is won, in other words, through a process of winning consent; in this regard, power is ideological more so than coercive. The work of influential French theorist Louis Althusser (1971) is also instructive in this sense. Althusser described how 'ideological state apparatuses' – meaning influential socializing institutions like education, mass media,

and religion (and many have argued in the last several decades, sport) – could serve to reinforce the purportedly commonsensical nature of certain ideas, providing a structural dimension (apparatus) for their dissemination.

As we shall see in Chapter 4, media in particular has been important in golf's environmental 'story', as television images of tournament courses in the post-war years helped instil a common sense idea of how a golf course should in fact appear. Subsequent chapters explore the use of formal public relations (PR) campaigns in the golf industry's quest to explain golf's environmental compatibility. That said, and acknowledging that critics have highlighted corporations' enlistment of PR professionals to reframe activities considered environmentally unfriendly, Greenberg *et al.* (2011) also make the important point that *various* actors work with PR firms and use established PR techniques in their attempts to mobilize support for their preferred positions. In their own environment-related research, for example, Greenberg *et al.* consider how environmental NGOs and their corporate adversaries engaged in PR-enabled 'spin wars' when it came to framing climate change debates. Greenberg *et al.*'s (2011) 'agnostic' approach is helpful for our purposes in the sense that we are interested in how different actors have responded to golf-related environmental concerns. We are attentive to the impression management techniques used by golf industry members attempting to 'frame' and 'spin' their environment-related activities for key audiences, though we also consider how groups protesting golf course development projects or turf management practices strive to raise awareness about and generate support for their oppositional or counter-hegemonic positions.

By considering bigger picture theories (like those proposed by Gramsci and Althusser) that describe how consent is generated for particular viewpoints alongside research on the techniques and strategies used to sway opinions and perspectives, we can begin to develop a textured approach to understanding why particular forms of environmental decision-making become and remain dominant. Of course, there is more to this picture than just the PR activity of industry. Governments too have adopted EM – again, generally without naming it as such – as a viable way of addressing environmental concerns without invoking the spectre of demodernization. As suggested in our above discussion of the treadmill of production and limits to growth frameworks, governments generally take for granted the merits of economic growth, and so are naturally inclined towards EM's positive triple bottom line messaging (see Davidson and MacKendrick, 2004). John Hannigan's (2006) concept of 'environmental managerialism' helps in taking this point a step further. Hannigan sees governments as 'dually mandated' at present, inclined by mandate towards both economic

growth, what with its positive implications for labour and capital, and environmental sustainability, what with its existential implications for humankind. The outcome of this Janus-faced predicament is often policies that gesture towards environmental solutions without impeding too much on industry. We shall explore environmental managerialism in relation to pesticide policy later in this book. For now, Hannigan's formulation is relevant to this discussion of hegemony in that it describes how, through the strategic and selective development of economic and environment-related legislation and policies, consent is generated or further cemented for particular responses to environmental concerns.

At this point it becomes clearer how a range of social actors – representatives of industry, government officials, sympathetic members of the public, and, at times, environmental groups – congregate around a particular (environmental) logic. There is one more 'character' to consider, however, in the fostering of consent: the environment itself. This may seem a curious inclusion. Yet authors such as Paul Robbins (2007) go a step beyond those who have used concepts like hegemony to describe how it is that practices such as the use of potentially harmful chemicals on golf courses are taken for granted by suggesting that non-humans can at times serve as 'active agents'. Here Robbins is drawing jointly on the writings of Bruno Latour and Louis Althusser in arguing that seemingly inanimate 'things' such as pristine turfgrass can ultimately compel people to act in certain ways. Robbins' (2007) own analysis centres on the treatment of personal lawns and the curious finding that 'lawn people' seem to be at the beck and call of their (highly manicured) grass. Lawn people are, according to Robbins, essentially 'turfgrass subjects' – compelled to use chemical applications *even though they generally accept that these chemicals are associated with negative health-related outcomes*. Of course, while the turf has agency in this seemingly bizarre relationship, this agency is itself derived from the wider context. The agency of the turf can be traced back to wider cultural norms and expectations about what a lawn *should* look like, how it can and should be treated, and what it means to have a blemished or unblemished lawn, among other factors. Mark Stoddart (2012) performed a similar analysis, in his case of sport, in assessing how non-human 'actants' on ski hills such as snow and animals 'direct' the activities of skiers and maintenance staff.

Thus, it is through the activity of multiple stakeholders – humans and non-humans alike – that we arrive at a situation whereby dominant ideas are established and alternative perspectives are made 'radical' or unrealistic. One interpretation here is that establishing a set of agreed upon principles, like those espoused by proponents of sustainability, is crucial for effective consensus

building, and as such should be embraced. A more critical orientation, however, would point towards the grounds upon which consensus *must* now be built. As Neo (2010) notes in his work on golf and the environment, and as we suggested in discussing sport and EM above, dialogue on *how* to deliver economically friendly sport events and spaces does not always include debates on *whether* such events or spaces should be offered or created in the first place. Said otherwise, the idea that economic and environmental issues can and should be dealt with simultaneously is never the subject of scrutiny.

Social theorist Slavoj Žižek (1999) calls these sorts of arrangements ‘post-political’ – meaning that only a narrow range of viewpoints and questions are considered viable – i.e. are heard or allowed – in forums where key issues are being debated. Post-politics differs from more open and inclusive forms of ‘contentious’ politics – i.e. political arrangements that leave room for myriad and perhaps ‘radical’ opinions. For example, under post-political conditions, the answer to potentially contentious questions such as ‘how should we deal with the environment- and health-impacting behaviours of industry?’ might begin from the consensus that economic growth should never be compromised. Dialogue then becomes about finding solutions that align with this already-established consensus – hence the post in ‘post-political’. Indeed, the concept of post-politics takes the concept of hegemony a step further. This is not just a process of winning consent for certain ideas, but of acting from the premise that consent has already been won.

Theorizing golf and social change

Of course, even within post-political arrangements, still not everyone offers consent to the (environmental) solutions in question or their underlying premises. Counter-hegemony is still possible; contentious political positions are still alive (but are not always well). As the cultural theorist Raymond Williams (1977) posited, dominant ideas exist alongside other types of ideas. These include ‘residual’ ideas that were at one time dominant but are now marginal and, even more pertinent for our purposes (see Chapter 9), ‘emergent’ ideas that have come into existence but are not dominant and may never become so.

Informed by Williams’ work, sociologists Jean Harvey, John Horne, and Parissa Safai (2009) devised a typology that depicted a range of sport-related responses to aspects of globalization and to related forms of neoliberal governance. In doing so, they distinguished between anti-globalization (or ‘rejectionist’) movements, alter-globalization movements (which include ‘transformist’

and 'reformist' movements), and pro-globalization or 'neoliberal' forms of globalization that value unimpeded trade. Harvey *et al.* (2009) depict these different responses as follows:

- Rejectionist (anti-globalization)
 - rejects all forms of globalization
 - privileges local/regional/national self-governing societies
- Transformist (alter-globalization)
 - resists neoliberal globalization
 - seeks new forms of globalization, opportunities for global movements
- Reformist (alter-globalization)
 - 'tamed' form of global capitalism
 - lobbies for better work conditions (e.g. in athletic apparel factories)
- Neoliberal
 - uninhibited, market-driven, limited regulation

Harvey *et al.*'s model is intriguing because it sheds light on the range of alternatives to the dominant neoliberal approach to globalization which sees the marketplace, above all else, as a driver of social 'good'. The model also highlights interesting and nuanced differences between these alternatives. For example, some alternative responses are intended to undermine fundamental features of globalization that are more closely aligned with neoliberalism, while others advocate for relatively minor tweaks to the current system. This model influenced our thinking about the sometimes stark and sometimes barely discernible distinctions that exist between the various responses to golf-related environmental problems that we identified through research of our own.

Our own strategy for arranging and visualizing responses to golf-related environmental issues was inspired by Harvey *et al.*'s theorizing. Yet our model also has several distinct features. Figure 1 maps out the pro-alter-anti-response (PAAR) continuum that we develop through the remainder of the book. The positions across the PAAR continuum each pertain to a set of responses to golf-related environmental problems. We have labelled the far left as 'pro-golf' to signify a position where golf course construction and maintenance takes place without inherent concern for environmental issues – a non-response if you will. It is also 'Promethean' in the sense that it is human-centric – a point we elaborate on in upcoming chapters. Those taking this extreme position are concerned with consumer/golfer preferences, and effectively deny that golf need be any more environmentally friendly than it already is. As we shall see, actually

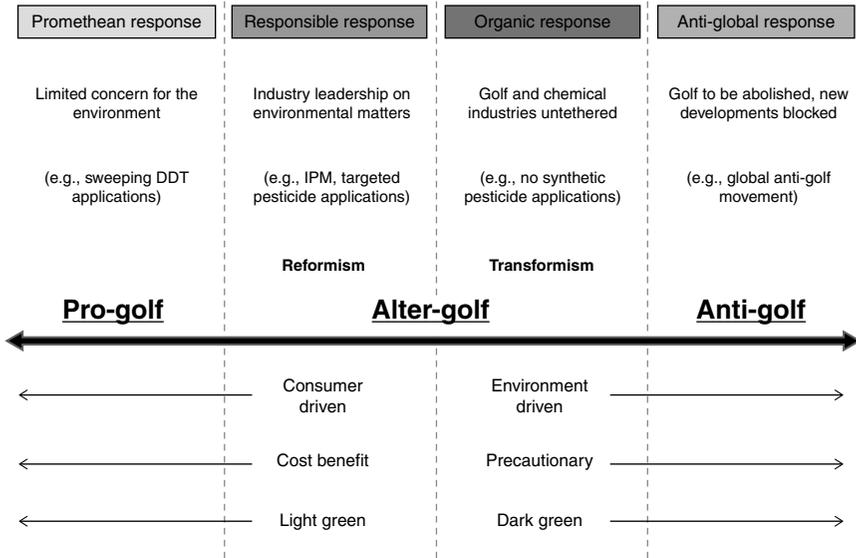


Figure 1 The pro-alter-anti-response (PAAR) continuum

taking this position – at least as a public stance on golf – is essentially untenable at the moment.

Across the middle of the continuum is a broader and more complex category of responses we call ‘alter-golf’. This includes the reformist responses that come from many in the golf industry and many governments. This sub-category includes attempts at making existing course maintenance and construction practices greener without fundamentally interrupting key economic drivers in the process. Practically speaking, this means that pesticide use is still tolerated and that the growth of the golf industry and related tourist industry are still encouraged – the idea being that such growth can take place ‘responsibly’. Such responses are open to critique from those who see responsible, industry-friendly activities as attempts to appear green without fundamentally changing environmental practices.

Alter-golf also includes transformational responses, such as ‘organic golf’ (see Chapter 9). The organic or ‘chemical-free’ response to concerns about pesticide use on golf courses is transformational in the sense that it demands that golf break from (or, at least, radically reimagine) the complex and lucrative supply chain that links the sport to the chemical industry. Organic golf also offers an alternative to the dominant and global trend towards pristine and predictable golf experiences that pro-golf is based on and that *reformist* versions of alter-golf seek to achieve by ‘responsible’ means. More generally, transformist alter-golf

responses tend to recognize that golf courses should only be constructed and supported under certain circumstances. In the conclusion to this book, we further discuss and ultimately advocate for this way of thinking about golf and its environmental future.

Finally, on the far right of the continuum are those who reject golf altogether. Individuals and groups taking this extreme stance include members of the Global Anti-Golf Movement and those who, for various reasons, reject proposals for golf courses on a more local level (see Chapter 8).

We can think of the responses on the left side of the table as being the 'lightest-green' responses. Moving across the table to the right, responses become increasingly 'darker green'. The lighter-green responses are based on assumptions about the ability of humans to 'modernize' – to move society forward so that economic and environmental problems are overcome through managerial and technological innovations. The darker-green and more ecocentric responses attempt to unsettle the modernizing narrative that often goes unquestioned by those pushing forward with sustainability-driven environmental work. Across the following chapters, we look closer at these different responses, assessing their strengths, limitations, and contradictions. In the spirit of our above analysis of how, in theory, power relations are created and maintained, we also pay particular attention to why some approaches are dominant and others are marginal or residual.

At the outset of this chapter we noted that we encountered a wide range of perspectives in our research on golf, from those of the golf industry proper to those of community residents seeing merits in, for example, creating courses on old landfill sites to those that effectively see 'responsible golf' as an oxymoron. Now with a selection of theoretical concepts in hand, we can start to paint a more nuanced picture of golf's environmental past, present, and future.

